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Agrément Certificate
xx/xxxx
Product Sheet 1 Issue 1

TERRAWOOL INSULATION

TERRAWOOL RAINCLAD FOR USE IN RAINSCREEN CLADDING SYSTEMS

This Agrément Certificate Product Sheet(1) relates to Terrawool Rainclad for use in Rainscreen Cladding Systems, a mineral wool (MW) slab for use as thermal insulation on timber- or steel-frame walls, reinforced concrete, and masonry walls, in new and existing domestic and non-domestic buildings, in conjunction with ventilated rainscreen cladding systems.

(1) Hereinafter referred to as 'Certificate'.

The assessment includes

Product factors:

- compliance with Building Regulations
- compliance with additional regulatory or non-regulatory information where applicable
- evaluation against technical specifications
- assessment criteria and technical investigations
- uses and design considerations

Process factors:

- compliance with Scheme requirements
- installation, delivery, handling and storage
- production and quality controls
- maintenance and repair

Ongoing contractual Scheme elements†:

- regular assessment of production
- formal 3-yearly review

KEY FACTORS ASSESSED

Section 1. Mechanical resistance and stability
Section 2. Safety in case of fire
Section 3. Hygiene, health and the environment
Section 4. Safety and accessibility in use
Section 5. Protection against noise
Section 6. Energy economy and heat retention
Section 7. Sustainable use of natural resources
Section 8. Durability

The BBA has awarded this Certificate to the company named above for the product described herein. This product has been assessed by the BBA as being fit for its intended use provided it is installed, used and maintained as set out in this Certificate.

On behalf of the British Board of Agrément

Date of issue:

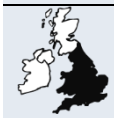
Hardy Giesler
Chief Executive Officer

SUMMARY OF ASSESSMENT AND COMPLIANCE

This section provides a summary of the assessment conclusions; readers should refer to the later sections of this Certificate for information about the assessments carried out.

Compliance with Regulations

Having assessed the key factors, the opinion of the BBA is that Terrawool Rainclad for use in Rainscreen Cladding Systems, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements of the following Building Regulations:



The Building Regulations 2010 (England and Wales) (as amended)

Requirement:	**B3(4)**	**Internal fire spread (structure)**
Comment:		The product can contribute to satisfying this Requirement. See section 2 of this Certificate.
Requirement:	**B4(1)**	**External fire spread**
Comment:		The product is unrestricted by this Requirement. See section 2 of this Certificate.
Requirement:	**C2(a)**	**Resistance to moisture**
Comment:		The product can contribute to satisfying this Requirement. See section 3 of this Certificate.
Requirement:	**C2(b)**	**Resistance to moisture**
Comment:		The product can contribute to satisfying this Requirement. See section 9 of this Certificate.
Requirement:	**C2(c)**	**Resistance to moisture**
Comment:		The product can contribute to satisfying this Requirement. See section 3 of this Certificate.
Requirement:	**L1(a)(i)**	**Conservation of fuel and power**
Comment:		The product can contribute to satisfying this Requirement; however, compensating fabric measures may be required. See section 6 of this Certificate.
Regulation:	**7(1)**	**Materials and workmanship**
Comment:		The product is acceptable. See sections 8 and 9 of this Certificate.
Regulation:	**7(2)**	**Materials and workmanship**
Comment:		The product may be unrestricted by this Regulation. See section 2 of this Certificate.
Regulation:	**25B**	**Nearly zero-energy requirements for new buildings**
Regulation:	**26**	**CO_2 emission rates for new buildings**
Regulation:	**26A**	**Fabric energy efficiency rates (applicable to England only)**
Regulation:	**26A**	**Primary energy rates for new buildings (applicable to Wales only)**
Regulation:	**26B**	**Fabric performance values for new dwellings**
Regulation:	**26C**	**Target primary energy rates for new buildings (applicable to England only)**
Regulation:	**26C**	**Minimum energy efficiency rating (applicable to Wales only)**
Comment:		The product can contribute to satisfying these Regulations; however, compensating fabric/service measures may be required. See section 6 of this Certificate.

The Building (Scotland) Regulations 2004 (as amended)

Regulation:	**8(1)**	**Fitness and durability of materials and workmanship**
Comment:		The product is acceptable. See sections 8 and 9 of this Certificate.
Regulation:	**8(3)**	**Fitness and durability of materials and workmanship**
Comment:		The product is unrestricted by this Regulation. See section 2 of this Certificate.
Regulation:	**9**	**Building standards – construction**
Standard:	2.4	Cavities
Comment:		The product can contribute to satisfying this Standard, with reference to clauses 2.4.2(1)(2), 2.4.4(1) and 2.4.6(2). See section 2 of this Certificate.
Standard:	2.6	Spread to neighbouring buildings
Comment:		The product is unrestricted by this Standard, with reference to clauses 2.6.5(1) and 2.6.6(2). See section 2 of this Certificate.
Standard:	2.7	Spread on external walls
Comment:		The product is unrestricted by this Standard, with reference to clause 2.7.1(1)(2). See section 2 of this Certificate.
Standard:	3.4	Moisture from the ground
Comment:		The product can contribute to satisfying this Standard, with reference to clauses 3.4.1(1)(2) and 3.4.5(1)(2). See section 3 of this Certificate.
Standard:	3.10	Precipitation
Comment:		The product can contribute to satisfying this Standard, with reference to clauses 3.10.1(1)(2) and 3.10.3(1)(2). See section 3 of this Certificate.
Standard:	3.15	Condensation
Comment:		The product can contribute to satisfying this Standard, with reference to clauses 3.15.1(1)(2), 3.15.4(1)(2) and 3.15.5(1)(2). See section 3 of this Certificate.
Standard:	6.1(b)(c)	Energy demand
Comment:		The product can contribute to satisfying this Standard, with reference to clauses 6.1.1(1) and 6.1.2(2); however, compensating fabric/service measures may be required. See section 6 of this Certificate.
Standard:	6.2	Building insulation envelope
Comment:		The product can contribute to satisfying this Standard, with reference to clauses 6.2.1(1)(2), 6.2.3(1), 6.2.4(2), 6.2.6(1), 6.2.7(1)(2), 6.2.8(1)(2), 6.2.9(1)(2), 6.2.10(1)(2), 6.2.11(2) and 6.2.12(1); however, compensating fabric measures may be required. See section 6 of this Certificate.
Standard:	7.1(a)(b)	Statement of sustainability
Comment:		The product can contribute to satisfying the relevant requirements of Regulation 9, Standards 1 to 6, and therefore will contribute to a construction meeting at least a bronze level of sustainability as defined in this Standard. In addition, the product can contribute to a construction meeting a higher level of sustainability as defined in this Standard, with reference to clauses 7.1.4(1), 7.1.6(1)(2), 7.1.7(1), 7.1.9(2) and 7.1.10(2). See section 6 of this Certificate.
Regulation:	**12**	**Building standards – conversion**
Comment:		All comments given for the product under Regulation 9, Standards 1 to 6, also apply to this Regulation, with reference to clause 0.12.1(1)(2) and Schedule 6(1)(2).

(1) Technical Handbook (Domestic).
(2) Technical Handbook (Non-Domestic).

The Building Regulations (Northern Ireland) 2012 (as amended)

Regulation:	**23(1)(a)(i)**	**Fitness of materials and workmanship**
Comment:	**(iii)(b)(i)(ii)**	The product is acceptable. See sections 8 and 9 of this Certificate.
Regulation:	**23(2)**	**Fitness of materials and workmanship**
Comment:		The product is unrestricted by this Regulation. See section 2 of this Certificate.
Regulation:	**28(a)**	**Resistance to moisture and weather**
Comment:		The product can contribute to satisfying this Regulation. See section 3 of this Certificate.
Regulation:	**28(b)**	**Resistance to moisture and weather**
Comment:		The product can contribute to satisfying this Regulation. See section 3 of this Certificate.
Regulation:	**29**	**Condensation**
Comment:		The product can contribute to satisfying this Regulation. See section 3 of this Certificate.
Regulation:	**35(4)**	**Internal fire spread – structure**
Comment:		The product can contribute to satisfying this Regulation. See section 2 of this Certificate.
Regulation:	**36(a)**	**External fire spread**
Comment:		The product is unrestricted by this Regulation. See section 2 of this Certificate.
Regulation:	**39(a)(i)**	**Conservation measures**
Comment:		The product can contribute to satisfying this Regulation; however, compensating fabric measures may be required. See section 6 of this Certificate.
Regulation:	**40(2)**	**Target carbon dioxide emission rate**
Regulation:	**43(1)(2)**	**Renovation of thermal elements**
Regulation:	**43B**	**Nearly zero-energy requirements for new buildings**
Comment:		The product can contribute to satisfying these Regulations; however, compensating fabric/service measures may be required. See section 6 of this Certificate.

Additional Information

NHBC Standards 2026

In the opinion of the BBA, Terrawool Rainclad for use in Rainscreen Cladding Systems, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements in relation to *NHBC Standards*, Chapters 6.1 *External masonry walls*, 6.2 *External timber framed walls,* 6.9 *Curtain walling and cladding* and 6.10 *Light steel framed walls and floors.*

The opinion of the BBA does not amount to any endorsement or approval by NHBC and does not in any way guarantee that NHBC will approve such product / system as compliant with the NHBC Technical Requirements and Standards.

Fulfilment of Requirements

The BBA has judged Terrawool Rainclad for use in Rainscreen Cladding Systems to be satisfactory for use as described in this Certificate. The product has been assessed as thermal insulation on timber- or steel-frame walls, reinforced concrete, and masonry walls, in new and existing domestic and non-domestic buildings, in conjunction with ventilated rainscreen cladding systems.

ASSESSMENT

Product description and intended use

The Certificate holder provided the following description for the product under assessment. Terrawool Rainclad for use in Rainscreen Cladding Systems comprises slabs of rigid rock mineral wool (MW) treated with a water-repellent additive.

The product has the nominal characteristics given in Table 1.

Table 1 Nominal characteristics

Characteristic (unit)	Value
Length (mm)	1200
Width (mm)	600
Thickness (mm)(1)	30, 40, 50, 60, 80, 90, 100, 120, 140, 150, 160, 180, 200, 220 and 240
Density (kg·m^{-3})	60
Edge profile	Square

Ancillary Items

The Certificate holder recommends the following ancillary items for use with the product, but these materials have not been assessed by the BBA and are outside the scope of this Certificate:

- rainscreen cladding panel and subframe
- insulation fasteners/fixings
- sheathing and lining board
- breather membrane
- air and vapour control layer (AVCL).

Applications

The product is intended for use as a thermal insulation in the following applications, in new and existing domestic and non-domestic buildings:

- on timber- or steel-frame walls, in conjunction with ventilated rainscreen cladding systems
- on reinforced concrete walls, in conjunction with ventilated rainscreen cladding systems
- on masonry walls (where masonry includes clay and calcium silicate bricks, concrete blocks, and natural and reconstituted stone blocks), in conjunction with ventilated rainscreen cladding systems.

Product assessment – key factors

The product was assessed for the following key factors, and the outcome of the assessments is shown below. Conclusions relating to the Building Regulations apply to the whole of the UK unless otherwise stated.

1 Mechanical resistance and stability

Not applicable.

2 Safety in case of fire

Data were assessed for the following characteristics.

2.1 Reaction to fire

2.1.1 The product was tested for reaction to fire, and the classification achieved is given in Table 2.

Table 2 Reaction to fire classification[1]

Product assessed	Assessment method	Requirement	Result
Terrawool Rainclad for use in Rainscreen Cladding Systems	EN 13501-1 : 2018	Value achieved	A1

(1) Efectis. Report no: ERA-20-219, 26 December 2020; copies available from the Certificate holder on request.

2.1.2 On the basis of data assessed, the product will be unrestricted under the documents supporting the national Building Regulations.

2.1.3 Designers must refer to the relevant national Building Regulations and guidance for detailed conditions of use, particularly in respect of requirements for substrate fire performance, cavity closers and barriers, fire stopping of service penetrations and combustibility limitations for other materials and components used in the overall wall construction.

2.2 Resistance to fire

Where the product is incorporated in a wall construction where fire resistance is required by the documents supporting the national Building Regulations, the fire resistance must be confirmed by a suitably experienced and competent individual.

3 Hygiene, health and the environment

Data were assessed for the following characteristics.

3.1 Effectiveness against rising damp

3.1.1 The product was tested for short-term water absorption by partial immersion, and the result is given in Table 3.

Table 3 Short-term water absorption by partial immersion

Product assessed	Assessment method	Requirement	Result
Terrawool Rainclad for use in Rainscreen Cladding Systems	BS EN 1609 : 1997	≤ 1 $kg \cdot m^{-2}$	Pass

3.1.2 On the basis of data assessed, the product, when used in a properly drained cavity, will not transfer moisture by capillary absorption and may be used in situations where it bridges the damp proof course (DPC) in walls. Dampness from the ground will not pass through to the inner leaf provided the wall is detailed in accordance with the requirements and provisions of the national Building Regulations.

3.2 Water vapour permeability

3.2.1 The product was assessed for water vapour resistivity, and the result is given in Table 4.

Table 4 Water vapour resistivity

Product assessed	Assessment method	Requirement	Result
Terrawool Rainclad for use in Rainscreen Cladding Systems	BS EN ISO 10456 : 2007	Declared value	5 $MN \cdot s \cdot g^{-1} \cdot m^{-1}$

3.2.2 An AVCL must be used unless a condensation risk analysis shows that it is not necessary.

4 Safety and accessibility in use

Not applicable.

5 Protection against noise

Not applicable.

6 Energy economy and heat retention

Data were assessed for the following characteristics.

6.1 Thermal conductivity

The product was tested for thermal conductivity, and the result is given in Table 5.

Table 5 Thermal conductivity

Product assessed	Assessment method	Requirement	Result
Terrawool Rainclad for use in Rainscreen Cladding Systems	BS EN 13162 : 2012	Declared value (λ_D)	0.035 $W \cdot m^{-1} \cdot K^{-1}$

6.2 Conservation of fuel and power

6.2.1 The U value of completed wall constructions will depend on the insulation thickness, the number and type of fixings, the wall structure (including the stud, cavity, insulation type and thickness) and internal finishes. Example U values are given in Tables 6 to 8.

Table 6 Example U values — timber frame rainscreen system(1)(2)

Target U value ($W \cdot m^{-2} \cdot K^{-1}$)	Insulation thickness installed against the sheathing board – no insulation in the 140 mm timber frame (mm)(3)	Insulation thickness installed against the sheathing board – fully-filled with insulation in the 140 mm timber frame (mm)(4)
0.13	—(5)	—(5)
0.15	—(5)	—(5)
0.17	—(5)	—(5)
0.18	—(5)	—(5)
0.21	—(5)	200
0.26	200	100
0.28	180	80
0.30	150	60

(1) Construction, external to internal: 10 mm rainscreen cladding, open fully-ventilated 50 mm clear cavity, Terrawool Rainclad, breather membrane, 9 mm timber OSB (oriented strand board) sheathing board (λ = 0.13 $W \cdot m^{-1} \cdot K^{-1}$), 140 mm timber frame ($\lambda$ = 0.13 $W \cdot m^{-1} \cdot K^{-1}$) (15% fraction), AVCL and 15 mm plasterboard (λ = 0.25 $W \cdot m^{-1} \cdot K^{-1}$).
(2) A fixing correction factor (ΔU_f) of 0.1 $W \cdot m^{-2} \cdot K^{-1}$ has been applied to allow for the thermal bridging of the insulation fixings, and rainscreen brackets and fixings.
(3) Insulation installed against the timber sheathing board with no insulation in the timber frame.
(4) Insulation installed against the timber sheathing board with 140 mm of insulation in the timber frame (λ = 0.035 $W \cdot m^{-1} \cdot K^{-1}$) with a 15% timber frame fraction.
(5) See section 6.2.3.

Table 7 Example U values — steel frame rainscreen system[1][2]

Target U value ($W \cdot m^{-2} \cdot K^{-1}$)	Insulation thickness installed against the sheathing board – no insulation in the 90 mm steel-frame system (mm)[3]	Insulation thickness installed against the sheathing board – fully-filled with insulation in the 90 mm steel-frame system (mm)[4]
0.13	—[5]	—[5]
0.15	—[5]	—[5]
0.17	—[5]	—[5]
0.18	—[5]	—[5]
0.21	—[5]	240
0.26	200	150
0.28	180	120
0.30	160	120

(1) Construction, external to internal: 10 mm rainscreen cladding, open fully-ventilated 50 mm clear cavity, Terrawool Rainclad, breather membrane, 9 mm timber OSB (oriented strand board) sheathing board (λ = 0.13 $W \cdot m^{-1} \cdot K^{-1}$), 90 mm light steel frame system (λ = 50 $W \cdot m^{-1} \cdot K^{-1}$)(0.2% fraction), AVCL and 15 mm plasterboard (λ = 0.25 $W \cdot m^{-1} \cdot K^{-1}$).
(2) A fixing correction factor (ΔU_f) of 0.1 $W \cdot m^{-2} \cdot K^{-1}$ has been applied, to allow for the thermal bridging of the insulation fixings, and rainscreen brackets and fixings.
(3) Insulation installed against the timber sheathing board with no insulation in the steel frame.
(4) Insulation installed against the timber sheathing board with 90 mm of insulation in the steel frame (λ = 0.035 $W \cdot m^{-1} \cdot K^{-1}$) with a 0.2% steel frame fraction.
(5) See section 6.2.3.

Table 8 Example U values — solid reinforced concrete rainscreen system[1][2]

Target U value ($W \cdot m^{-2} \cdot K^{-1}$)	Insulation thickness installed against the reinforced concrete panel (mm)
0.13	—[3]
0.15	—[3]
0.17	—[3]
0.18	—[3]
0.21	—[3]
0.26	200
0.28	180
0.30	160

(1) Construction, external to internal: 10 mm rainscreen cladding, open fully-ventilated 50 mm clear cavity, Terrawool Rainclad, 150 mm reinforced concrete (1% steel, λ = 2.3 $W \cdot m^{-1} \cdot K^{-1}$),15 mm dot and dab adhesive cavity (λ = 0.43 $W \cdot m^{-1} \cdot K^{-1}$, 20% adhesive bridge) and 15 mm plasterboard (λ = 0.25 $W \cdot m^{-1} \cdot K^{-1}$).
(2) A fixing correction factor (ΔU_f) of 0.1 $W \cdot m^{-2} \cdot K^{-1}$ has been applied, to allow for the thermal bridging of the insulation fixings, and rainscreen brackets and fixings.
(3) See section 6.2.3.

6.2.2 On the basis of data assessed, the product can contribute towards a construction satisfying the national Building Regulations in respect of energy economy and heat retention.

6.2.3 For improved energy or carbon savings, designers must consider appropriate compensating fabric/service measures.

7 Sustainable use of natural resources

Not applicable.

8 Durability

8.1 The potential mechanisms for degradation and the known performance characteristics of the materials in this product were assessed.

8.2 The product was tested for dimensional stability, and the result is given in Table 9.

Table 9 Dimensional stability

Product assessed	Assessment method	Requirement	Result
Terrawool Rainclad for use in Rainscreen Cladding Systems	EN 1604 : 2013	Length, width and reduction in thickness ≤ 1% change	Pass

8.3 Service life

Under normal service conditions, the product will have a life equivalent to the structure in which it is incorporated, provided it is designed, installed and maintained in accordance with this Certificate and the Certificate holder's instructions.

PROCESS ASSESSMENT

Information provided by the Certificate holder was assessed for the following factors:

9 Design, installation, workmanship and maintenance

9.1 Design

9.1.1 The design process was assessed by the BBA, and the following requirements apply in order to satisfy the performance assessed in this Certificate.

9.1.2 The wall and sub-frame must be structurally sound, and must be designed and constructed in accordance with the following Standards and, where appropriate, their UK national annexes:

- BS 5250 : 2021
- BS 8000-3 : 2020
- BS EN 351-1 : 2023
- BS EN 845-1 : 2013
- BS EN 1993-1-2 : 2005 and its UK National Annex
- BS EN 1993-1-3 : 2006 and its UK National Annex
- BS EN 1995-1-1 : 2004 and its UK National Annex
- BS EN 1996-1-1 : 2022 and its UK National Annex
- BS EN 1996-1-2 : 2024 and its UK National Annex
- BS EN 1996-2 : 2006 and its UK National Annex
- BS EN 1996-3 : 2023 and its UK National Annex.

9.1.3 Certain rainscreen systems, such as those with open joints, may require the addition of a breather membrane incorporated into the system. The requirement for a membrane must be determined by the system designer and is outside the scope of this Certificate.

9.1.4 Care must also be taken in the overall design and construction of elements incorporating the insulation to ensure appropriate:

- sheathing or bracing for frame elements. The insulation must not be relied on to provide any structural contribution, eg racking strength
- fire resistance, for both elements and junctions
- cavity barriers and fire dampers
- continuity of insulation to minimize thermal bridging
- resistance to the ingress of precipitation and moisture from the ground.

9.1.5 Wind loads must be calculated by a suitably experienced and competent individual in accordance with the principles of BS EN 1991-1-4 : 2005 and its UK National Annex. The higher-pressure coefficients applicable to corners of buildings must be used.

9.1.6 Although the product will not be directly exposed to wind, each installation must be designed to withstand, without damage or permanent deformation, the pressures imposed by wind forces. The product will experience substrate movement which must be considered in the structural design of the construction.

9.1.7 The adequacy of fixing to the structural frame or substrate for specific installations is outside the scope of this Certificate and must be verified by a suitably experienced and competent individual. Particular care is required around window and door openings to ensure that the structure is capable of sustaining additional weight owing to reveal/frame details.

9.1.8 External walls must be in good condition and must resist the ingress of rain.

9.1.9 The designer must select a construction appropriate to the local wind-driven rain index to BS EN 1996-2 : 2006 and its UK National Annex, paying due regard to the design detailing, workmanship and materials to be used. It is essential that such walls are designed and constructed to incorporate the normal precautions.

9.1.10 The air gap between the face of the insulation and the back of the rainscreen panels must be of sufficient width to allow any water passing the joints to run down the back of the rainscreen panels and be discharged externally without wetting the insulation or the backing wall.

9.1.11 The minimum width for air gaps required by NHBC is:

- 50 mm, for panels with open joints
- 38 mm, for panels with baffled or labyrinth (rebated) joints.

9.1.12 Care must be taken to ensure that the types of façades and wall finishes, and the design and detailing around openings, are appropriate for the anticipated exposure conditions and, if necessary, resist the movement of the frame.

9.1.13 The product must be kept dry before the cladding is applied.

9.1.14 The construction must be made weathertight as soon as practically possible to ensure maximum protection of the product.

9.1.15 The detailed provisions given in the documents supporting the national Building Regulations for when the product is installed in close proximity to certain flue pipes and/or heat-producing appliances must be followed.

9.1.16 To resist the passage of moisture from the ground, an adequate DPC and membranes must be provided in accordance with conventional good practice.

9.1.17 Cavity barriers must be provided as required by the documents supporting the national Building Regulations.

9.1.18 Weather resistance is provided as required by an external cladding system (outside the scope of this Certificate).

9.1.19 Calculations of the thermal transmittance (U value) of a wall must be carried out in accordance with BS EN ISO 6946 : 2017 and BRE Report BR 443 : 2019, and where applicable BRE Digest 465 : 2002.

9.1.20 Care must be taken in the overall design and construction of junctions with other elements and openings to minimise thermal bridges and air infiltration. Detailed guidance can be found in the documents supporting the national Building Regulations.

Interstitial condensation

9.1.21 Walls will adequately limit the risk of interstitial condensation when they are designed and constructed in accordance with BS 5250 : 2021.

9.1.22 The product can contribute to maintaining continuity of thermal insulation at junctions with other elements and minimise thermal bridges. Detailed guidance can be found in the documents supporting the national Building Regulations. Advice can also be sought from the Certificate holder, but such advice is outside the scope of this Certificate.

Surface condensation

9.1.23 In England and Wales, walls will adequately limit the risk of surface condensation when the thermal transmittance (U value) does not exceed 0.7 $W \cdot m^{-2} \cdot K^{-1}$ at any point, and the junctions with other elements are designed in accordance with the guidance referred to in section 9.1.20 of this Certificate.

9.1.24 For buildings in Scotland, wall constructions will be acceptable when the thermal transmittance (U value) does not exceed 1.2 $W \cdot m^{-2} \cdot K^{-1}$ at any point, and the junctions with other elements are designed in accordance with the guidance referred to in BS 5250 : 2021. Further guidance may be obtained from BRE Report BR 262 : 2002 and section 9.1.20 of this Certificate.

9.2 Installation

9.2.1 Installation instructions provided by the Certificate holder were assessed and judged to be appropriate and adequate.

9.2.2 Installation must be carried out in accordance with this Certificate and the Certificate holder's instructions. A summary of instructions and guidance is provided in Annex A.

9.2.3 Existing constructions must be in a good state of repair, with no evidence of rain penetration or damp. Defects must be made good prior to installation.

9.2.4 Any mould or fungal growth found to be present must be treated.

9.2.5 Installation must not be carried out until the moisture content of any timber is less than 20% by mass.

9.2.6 It is important to ensure a tight fit between slabs. Trimming must be accurate, to achieve close-butted joints and continuity of insulation. The horizontal joints of the insulation must be staggered in accordance with good practice.

9.2.7 The insulation is fixed against the external face of the sheathing board or against the external face of masonry substrates, in conjunction with a weathertight rainscreen cladding(1), maintaining a cavity to ensure drainage.

(1) Rainscreen cladding systems are proprietary and utilise various mechanisms for attaching rainscreen cladding panels to the wall structure. Site work guidance must be sought from the system manufacturer.

9.2.8 Fixings must have a minimum head diameter of 70 mm. A typical fixing pattern has 3 fixings per m^2, with one metal fixing at the centre of each slab.

9.2.9 The construction must be made weathertight as soon as is practically possible to ensure maximum protection of the product and the product must be kept dry until the cladding is applied.

9.3 Workmanship

Practicability of installation was assessed by the BBA, on the basis of the Certificate holder's information. To achieve the performance described in this Certificate, installation of the product must be carried out by a competent general builder, or a contractor experienced with this type of product.

9.4 Maintenance and repair

As the product is confined between the cladding and frame, and has suitable durability, provided the integrity of the cladding is maintained throughout the life of the product, maintenance is not required.

10 Manufacture

10.1 The production processes for the product have been assessed, and provide assurance that the quality controls are satisfactory according to the following factors:

10.1.1 The manufacturer has provided documented information on the materials, processes, testing and control factors.

10.1.2 The quality control operated over batches of incoming materials has been assessed and deemed appropriate and adequate.

10.1.3 The quality control procedures and product testing to be undertaken have been assessed and deemed appropriate and adequate.

10.1.4 The process for management of non-conformities has been assessed and deemed appropriate and adequate.

10.1.5 An audit of the production location was undertaken, and it was confirmed that the production process was in accordance with the documented process, and that equipment has been properly tested and calibrated.

† 10.2 The BBA has undertaken to review the above measures on a regular basis through a surveillance process, to verify that the specifications and quality control operated by the manufacturer are being maintained.

11 Delivery and site handling

11.1 The Certificate holder stated that the product is delivered to site in packaging bearing a label bearing the Certificate holder and product names and BBA logo incorporating the number of this Certificate.

11.2 Delivery and site handling must be performed in accordance with the Certificate holder's instructions and this Certificate, including:

11.2.1 Packs must be stored under cover until required for use.

11.2.2 Dust masks, gloves and long-sleeved clothing must be worn when cutting and handling the insulation.

†ANNEX A – SUPPLEMENTARY INFORMATION

Supporting information in this Annex is relevant to the product but has not formed part of the material assessed for the Certificate.

Construction (Design and Management) Regulations 2015
Construction (Design and Management) Regulations (Northern Ireland) 2016

Information in this Certificate may assist the client, designer (including Principal Designer) and contractor (including Principal Contractor) to address their obligations under these Regulations.

CE marking

The Certificate holder has taken the responsibility of CE marking the product in accordance with harmonised European Standard EN 13162 : 2012.

Additional information on installation

A.1 The product can be cut using a fine-toothed saw or sharp knife, but care must be taken to prevent damage, particularly to edges.

A.2 Installation may start below DPC level to help insulate the edge of the floor slab. The slabs may be fitted either landscape or portrait format.

A.3 Slabs must be close-butted at all vertical and horizontal joints. The horizontal joints of the insulation must be staggered in accordance with good practice.

A.4 For a typical installation, a breathable membrane is placed between the sheathing board and the product. An AVCL is placed between the plasterboard and the frame. Designers must, however, choose a suitable construction on a case-by-case basis for a particular installation.

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Conditions

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